

# **DOMINANT MANEUVER, A MANIFESTATION OF FOCUSED LOGISTICS**

**A MONOGRAPH  
BY  
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Infantry**



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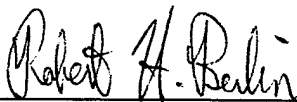
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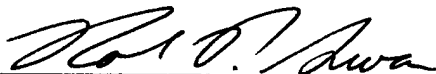
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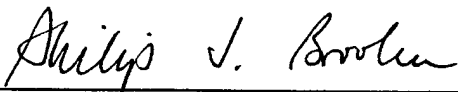
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## **ABSTRACT**

**Dominant Maneuver, A Manifestation of Focused Logistics** BY Major Michael E. Hamlet, USA, 39 pages.

One week after the armed forces of the United States and Great Britain hit 85 percent of their targets during the four days of Operation Desert Fox in December 1998, Iraq again challenged the United States by firing surface to air missiles at aircraft patrolling the no fly zones established after Operation Desert Storm. Iraq's challenge seems to bolster critics' point of view that pinpoint bombing alone cannot achieve the political and military endstates desired by the military or the administration. Critics warn that the Pentagon's costly and ambitious drive to acquire and employ high-tech weapons ignores the political and strategic dimensions of warfare.

The Pentagon's pursuit of high-tech weapons is guided by "Joint Vision 2010". "Joint Vision 2010" published in early 1996, not only presents a vision of the future but serves as a guide for current and future technical and budgetary decisions. "Joint Vision 2010" is the statement of an envisioned future which will guide the armed forces through its transformation from a twentieth century analogue force to a digital force capable of protecting the interests of United States in the strategic environment of the twenty-first century. "Joint Vision 2010" envisions the transformation of the armed forces will occur through the development and implementation of four new operational concepts, new organizational designs and the fielding and development of advanced weapon systems.

This monograph examines two of these new operational concepts, dominant maneuver and focused logistics. These two concepts are examined to determine if the operational concept of focused logistics presented in "Joint Vision 2010" supports the operational concept of dominant maneuver presented in "Joint Vision 2010". The significance of this examination is that the as yet achieved capabilities envisioned in the concept of dominant maneuver are the justification for controversial changes to force structure and long term budgetary decisions. However these capabilities are unattainable if the concept and capabilities of focused logistics do not support them.

To examine this question, the monograph compares and contrasts the operational concepts of dominant maneuver and focused logistics as presented in "Joint Vision 2010" against one another. Data collected is summarized in a descriptive comparison of the elements and requirements of the operational concepts of dominant maneuver and focused logistics.

The monograph concludes that the capabilities presented in the concept of dominant maneuver are largely the result of the achievement of focused logistics. The monograph cautions against confusing the capabilities set forth in "Joint Vision 2010" with the current realities.

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## **I. The Need for Change**

One week after the armed forces of the United States and Great Britain hit 85 percent of their targets during the four days of Operation Desert Fox in December 1998, Iraq again challenged the United States by firing surface to air missiles at aircraft patrolling the no fly zones established after Operation Desert Storm. Iraq's challenge seems to bolster critics' point of view that pinpoint bombing alone cannot achieve the political and military endstates desired by the United States. Critics, most notably Anthony Cordesman, a senior Middle East Military Analyst at the Center for Strategic and International Studies, fear the United States is learning the wrong lessons from its long confrontation with Iraq.<sup>1</sup> Nevertheless, the U.S. Department of Defense (DOD) has embarked on an ambitious ten-year effort to design and acquire increasingly precise weapons, sensors and information systems. Additionally, DOD is implementing major changes in the structure of the armed forces to capitalize on these yet to be developed or proven capabilities.

Critics warn that the Pentagon's costly and ambitious drive to acquire and employ high-tech weapons ignores the political and strategic dimensions of warfare. Anthony Cordesman and others warn that the Pentagon's fascination with technology and the relatively little attention paid to the development of corresponding strategy will hamper the United States ability to deal with rogue states. According to Cordesman, Operation Desert Fox is the perfect example of

how difficult it is to fight a highly political war where perception and political influence is more important than the exchange of firepower.<sup>2</sup>

The Pentagon's pursuit of high-tech weapons is guided by "Joint Vision 2010". "Joint Vision 2010" presents a vision of how the very nature of warfare will be transformed through advanced technology which will revolutionize military affairs. "Joint Vision 2010" published in early 1996, not only presents a vision of the future but serves as a guide for current and future technical and budgetary decisions. Alarming, critics assert that this vision is not an adequate view of the future ignoring the political, strategic and operational aspects of warfare. Critics are particularly concerned that in this era of limited defense dollars and rapidly changing strategic environments, long term budget decisions and force structure changes are being implemented in accordance with "Joint Vision 2010". These changes are based on capabilities and technologies not yet developed or proven.<sup>3</sup>

However, General Henry H. Shelton, Chairman of the Joint Chiefs of Staff believes that "Joint Vision 2010" is a necessary and dynamic vision of the future on which the armed forces of the United States must actively pursue. "Much of the tragedy of World War One stemmed from military leaders' inability to grasp the implication of change".<sup>4</sup> According to General Shelton one of the most important challenges facing the Armed Forces of the United States is its transformation "into a joint force, tailored to a new security environment and capable of employing revolutionary new systems and operational concepts to achieve decisive success".<sup>5</sup> "Joint Vision 2010" is the statement of an

envisioned future which will guide the armed forces through its transformation from a twentieth century analogue force to a digital force capable of protecting the interests of United States in the strategic environment of the twenty-first century. This transformation is a very large and challenging undertaking, which involves changes to force structure and the incorporation of new technology, equipment and doctrine. Additionally, the armed forces must meet this challenge of incorporating new technology and implementing force structure changes while maintaining its ability to accomplish on going and new near term missions.

The need for change in force structure and the incorporation of new technology is the direct result of three factors. The first factor is the dramatic changes that have occurred in the world security environment since the collapse of the Soviet Union. Second, facing this changed security environment the United States Armed Forces is entering the twenty-first century much smaller and with less funding then at any other time since World War Two, <sup>6</sup> while being tasked to execute missions around the world, across the entire spectrum of conflict. Lastly, at the end of the twentieth century technological advances have been made which have the potential to greatly increase the capabilities of the smaller United States Armed forces to rapidly respond to this changed security environment in the future.<sup>7</sup>

The security environment of the future although comprised of many familiar and readily identifiable threats to U.S. security interests is also envisioned to contain elements for which the U.S. armed forces are ill equipped and untrained to deal with. The security environment of the twenty-first century



will still include traditional nation states hostile to the United States. It is against the threat of nation states that the U.S. armed forces have been traditionally structured and resourced. Although there is no nation state which can currently be regarded as a peer competitor to the United States Armed Forces many opponents will have state of the art technology and capabilities which presents threats the United States has never faced in combat. Such technologies include secure communications, global positioning systems and weapons of massed destruction. Additionally, the twenty-first century security environment will include non-state actors such as terrorist groups motivated by ethnic, religious, cultural and economic factors. These groups as a consequence of the fall of the Soviet Union and the availability of advanced equipment in the international market have the potential to have same capabilities as a nation state.<sup>8</sup>

Consequently, the U.S. armed forces must be capable of "achieving a rapid decision on the battle field and in operations other than war".<sup>9</sup> The conceptual framework for the U.S armed forces to accomplish this is presented in "Joint Vision 2010". "Joint Vision 2010" envisions the transformation of the armed forces will occur through the development and implementation of four new operational concepts, new organizational designs and the fielding and development of advanced weapon systems.

This monograph examines two of these new operational concepts, dominant maneuver and focused logistics. These two concepts are examined to determine if the operational concept of focused logistics supports the operational concept of dominant maneuver presented in "Joint Vision 2010". The

significance of this examination is that capabilities envisioned in the concept of dominant maneuver which have yet to be achieved are the justification for controversial changes to force structure and long term budgetary decisions. However these capabilities are unattainable if the concept and capabilities of focused logistics do not support them.

The primary research method used throughout this study is the compilation and analysis of historical and descriptive data pertaining to operational design and operational concepts. This data was collected from different U.S. Army agencies; education centers, and research centers and secondary sources that analysis and study military theory. The monograph compares and contrasts the operational concepts of dominant maneuver and focused logistics as presented in "Joint Vision 2010" against one another. Data collected is summarized in a descriptive comparison of the elements and requirements of the operational concepts of dominant maneuver and focused logistics.

## **II. The Vision**

Joint Vision (JV) 2010 is presented as the conceptual template for how the United States' Armed Forces intends to leverage technology to achieve new levels of effectiveness in joint warfighting. In reality, "JV 2010" is also the justification for budgetary requests and force structure.<sup>10</sup> The focus of "JV 2010" is on achieving dominance across the range of military operations through the application of new operational concepts, providing a common direction for the armed forces in the development of capabilities within a common framework of joint doctrine and programs.

"JV 2010" addresses the need for change in view of expected continuities and changes in the strategic environment, including technology trends and their implications for the United States armed forces. The vision of future warfighting presented in "JV 2010" includes improved intelligence and command and control processes available in the information age and goes on to develop four operational concepts: dominant maneuver, precision engagement, full-dimensional protection, and focused logistics.<sup>11</sup>

Each of these operational concepts requires trained personnel and information-age technological advances, builds on current core competencies, and focuses on the development of future joint capabilities. The application of these four concepts is foreseen to provide the United States with the capability to dominate an opponent across the range of military operations referred to as Full

Spectrum Dominance. Full Spectrum Dominance is viewed as critical for the U.S. armed force to successfully confront the future and is the endstate and defining characteristic the U.S. is pursuing through the implementation of "JV 2010".<sup>12</sup>

The future envisioned in "JV 2010" is addressed through evolutionary not revolutionary terms and concepts. This is presented through the continuity of present day American goals and interests missions, tasks, and forces which include: protecting the lives and safety of Americans both at home and abroad; maintaining the political freedom and national independence of the United States with its values, institutions, and territory intact; and providing for the well-being and prosperity of the nation and its people. These goals are the source of continued American interests such as enhancing US security, promoting prosperity at home, and promoting democracy abroad. The United States has undertaken foreign and security policies aimed at securing these interests such as ensuring strong relations with U.S. allies, protecting U.S. rights of transit on the high seas, and enlarging the community of free market democracies. These interests and associated policies are likely to continue to be pursued in the twenty-first century.<sup>13</sup>

To protect these vital national interests the United States believes it must maintain strong armed forces, which are organized, trained, and equipped to fight and win against any adversary at any level of conflict including operations other than war. Accordingly, "JV 2010" asserts that "The primary task of the Armed Forces will remain to deter conflict but, should deterrence fail, to fight and

win our nation's wars".<sup>14</sup> Accomplishment of these tasks will continue to depend on the fundamental U.S. strategic concept of power projection, enabled by overseas presence. According to "JV 2010" vision of the future, the U.S. armed forces will continue to remain largely based in the continental United States (CONUS) with a portion of U.S. forces permanently stationed overseas forces, infrastructure and equipment, temporarily deployed forces, and the interaction between US and foreign militaries continuing to be required to demonstrate U.S. commitment and strengthen U.S. military capabilities. Power projection from the United States, achieved through rapid strategic mobility is seen as continuing to be essential for the U.S. to provide a timely response for conflict prevention, and peacetime activities which are foreseen to be the preponderance of U.S. military activity in the twenty-first century.<sup>15</sup>

The twenty-first century is also seen in "JV 2010" as an era accelerating technological change with an enormous impact on all military forces. General Henry Shelton, Chairman of the United States Joint Chiefs of Staff, believes that the adaptation of new and improved technologies will provide great increases in specific capabilities. Conversely, he believes that failure to understand and adapt these technologies will lead today's armed forces into obsolescence much like that seen with forces involved in World War One. The urgency of pursuing and implementing changes based on this technology lies in General Henry Shelton's and others view that today's armed forces are incapable of effective operations against forces with high technology and capabilities similar to those of the United States.<sup>16</sup>

To counter the increasing technological capabilities of potential opposing forces long-range precision capability, combined with a wide range of delivery systems, is seen as emerging as a key factor in future warfare. Global positioning systems, high-energy research, electromagnetic technology, and enhanced standoff capabilities are being pursued to provide increased accuracy and a wider range of delivery options. The result of these technological pursuits is increased combat power available for use against selected objectives, resulting in enhanced economy of force and a higher tempo of operations.<sup>17</sup>

Improvements in information and systems integration technologies will have a significant impact on future military operations by providing decision-makers with accurate information in a timely manner. Information technology being developed will improve the ability to see, prioritize, assign, and assess information. This fusion of all-source intelligence with the full integration of sensors, platforms, command organizations, and logistic support centers is seen to allow a greater number of operational tasks to be accomplished faster. Critical to this capability are advances in computer processing, precise global positioning, and telecommunications which will provide the capability to determine accurate locations of friendly and enemy forces, as well as to collect, process, and distribute this information to critical command and control nodes. The result is the achievement of dominant battlespace awareness. Although this capability is not advertised as eliminating the fog of war, dominant battlespace awareness is seen as improving situational awareness, decreasing response time, and making the battlespace considerably more transparent.<sup>18</sup>

The combination of these technology trends is foreseen in a strategic context to result in greatly improved rapid power projection capability and a reduced logistics tails. Operationally, these capabilities are seen to result in a more rapid transition from deployment to full operational capability. As a result, the United States will improve its capability for rapid, worldwide deployment while becoming even more tactically mobile and lethal.<sup>19</sup>

To exploit the enormous potential of this technology, the U.S. Department of Defense has developed a systematic process to exploit the full range of technological enhancements. Joint Vision 2010 is the conceptual document that is the basis for this process beginning with a new conceptual framework for operations. The basis for this framework is improved command, control, and intelligence, assured by information superiority. Enhanced command and control, improved intelligence, along with other applications of new technology is foreseen to transform the traditional functions of maneuver, strike, protection, and logistics. These transformations are asserted to have become the new operational concepts of dominant maneuver; precision engagement; full-dimensional protection and focused logistics.

"JV 2010" envisions the conceptual framework provided by these operational concepts and the technological capabilities developed in support of them will result in a force, which attacks enemy centers of gravity at all levels to compel an adversary to either react from a position of disadvantage or quit.<sup>20</sup> The endstate of "JV 2010" is a small yet capable military force which can rapidly deploy anywhere in the world, in response to any requirement across the

spectrum of conflict, dominant and overwhelm any enemy with minimal force and minimal friendly casualties. This ability to achieve full spectrum dominance is envisioned to not only allow the U.S. military to pursue and protect U.S. security interests in the twenty-first century but will also act as a deterrent against nation states and non-nation state actors who oppose or threaten U.S. goals and interests.



### **III. Dominant Maneuver**

Current U.S. Joint doctrine is based on rapid, flexible and opportunistic maneuver. In order to understand fully contemporary maneuver warfare theory and the concept of dominant maneuver, the underlying concept must be clarified. The traditional understanding of maneuver is a spatial one where forces maneuver in space to gain a positional advantage. However, in order to maximize the usefulness of maneuver, we must consider maneuver in time as well. Maneuver in time is where forces generate a faster operational tempo than the enemy to gain a temporal advantage. It is through maneuver in both time and space that an inferior force can achieve decisive superiority at the necessary time and place<sup>21</sup>.

The concept of maneuver warfare seeks to defeat the enemy by attacking or threatening to attack his center of gravity and shattering the "enemy's cohesion through a series of rapid, violent and unexpected actions," which create an uncertain, and "rapidly deteriorating situation with which he can not cope."<sup>22</sup> The aim of maneuver warfare is to render the enemy incapable of resisting by shattering his moral and physical cohesion, in other words his ability to fight as an effective and cohesive unit, rather than defeating him by destroying him physically through attrition. Although with attrition warfare victory is assumed to be mathematically calculable, it is generally more costly and time consuming. Ideally, the components of the enemy's physical strength that remain are

irrelevant because their ability to use them effectively has been paralyzed or destroyed. Even if an outmaneuvered enemy continues to fight as individuals or small units, the remnants can be destroyed with relative ease because his ability to fight effectively as a force has been eliminated.<sup>23</sup>

This is not to imply that firepower is unimportant. On the contrary, the suppressive effects of firepower are essential to maneuver. Nor does maneuver warfare imply that the opportunity to physically destroy will be passed up. Fires and forces will be concentrated at decisive points to destroy enemy elements when the opportunity presents itself and when it fits a larger purpose. The purpose of maneuver warfare is not an unfocused application of firepower for the purpose of incrementally reducing the enemy's physical strength through attrition. Rather it is the selective application of firepower in support of maneuver to contribute to the enemy's shock and moral disruption. The greatest value of firepower is not physical destruction, but the moral dislocation it causes.<sup>24</sup>

With the aim of maneuver warfare being to shatter the enemy's cohesion, the first requirement is to create a situation in which the enemy cannot function. Maneuver warfare seeks to create these dilemmas for the enemy unexpectedly and faster than the enemy can react. The enemy must perceive his situation as not only deteriorating, but also doing so at an ever-faster rate. The ultimate goal is to instill panic and paralysis in an enemy by placing him in a position in which he has lost his ability to resist.<sup>25</sup>

Inherent in maneuver warfare and the operational concept of dominant maneuver is the requirement for speed to seize the initiative, dictate

the terms of combat, and keep the enemy off balance. Therefore, maneuver warfare strives to concentrate friendly strengths against enemy critical vulnerabilities, striking quickly and boldly where, when and how it will cause the greatest damage to the enemy's ability to fight. Maneuver warfare is opportunistic, actively seeking signs of weakness, against which all available combat power is directed. To accomplish this Martin van Creveld asserts that there are six vital elements inherent to maneuver warfare: tempo, Schwerpunkt, surprise, combined arms, flexibility and decentralized command.<sup>26</sup>

The first vital element is tempo. Tempo is not the same as speed; doctrinally it is defined as:

The rate of military action; controlling or altering the rate is a necessary means to initiative. All military operations alternate between action and pauses as opposing forces battle one another and fight friction to mount and execute operations at the time and place of their choosing.<sup>27</sup>

However, it may have been best defined by Colonel John Boyd, USAF, in his briefing on the "Patterns of Conflict," and can be summarized as follows:

Conflict can be seen as time-competitive observation-oriented-decision-action cycles. Each party to a conflict begins by observing. He observes himself, his physical surroundings and his enemy. On the basis of his observation, he orients by creating a mental image of his situation. On the basis of this orientation, he makes a decision. He puts the decision into effect. Then because he assumes that his action has changed the situation, he again observes and starts the process anew."<sup>28</sup>

Actions, which follow this cycle, are often referred to as following the decision cycle or OODA Loop. The purpose of tempo is to get "inside" the opponent's loop by transitioning from one mode to another faster than the opponent can react. Through the use of greater tempo and velocity, maneuver warfare seeks

to establish a pace that the enemy cannot maintain so that with each action his reactions are increasingly late, until eventually the opponent is overcome by events.

The second vital element in maneuver warfare is *Schwerpunkt*. *Schwerpunkt* is a German term commonly defined as the "point of main effort." This point of main effort however does not necessarily refer to a specific geographic location but refers to where in time and space the commander believes he can attack an enemy vulnerability and achieve a decision; this is translated in terms of a unit.<sup>29</sup> The effort of the unit is then focused at the center of gravity, "sometimes known as hitting the enemy at the right time at the right place with the most force."<sup>30</sup> The German commanders of World War Two used "surfaces and gaps" to decide where to place the *Schwerpunkt*. Instead of expending time and forces attacking strong points (surfaces), commanders searched for weaknesses (gaps) to place *Schwerpunkt* in a position to achieve operational successes.<sup>31</sup> This is not as easy as it seems, a leader who is able to discern his enemy's vulnerability is said to have *coup d'oeil*, or the ability to intuitively recognize an enemy's vulnerability in "the flash of an eye." The concept of *Schwerpunkt* is often confused with attacking the enemy where he is strongest or where he is weakest. The former will clash strength against strength, attrition warfare, and the latter will lead to attacking dead ends, thus having no decisive effect on the enemy and wasting friendly forces. The key therefore is to find an enemy's critical vulnerability; a spot that is both vital and weakly defended.<sup>32</sup>

Surprise is the third vital element of maneuver warfare. Deployed forces face a thinking opponent, and can expect him to protect his centers of gravity with every means at his disposal. By studying the enemy deployed forces will attempt to appreciate his perceptions and through deception try to shape his expectations. Deployed forces will be able to dislocate the enemy by striking at an unexpected time and place. In order to appear unpredictable, deployed forces must avoid set rules or patterns and operate on axis that offer several courses of action, keeping the enemy unclear as to which will be chosen.<sup>33</sup>

The fourth-vital element of maneuver warfare is combined arms. Combined arms warfare is the grouping of diverse arms (infantry, armor, artillery, aviation, etc.) to produce a synergistic effect "to confuse, demoralize and destroy the enemy."<sup>34</sup> This is achieved in combined arms warfare by utilizing the strength of each arm to expose an enemy weakness to another. Martin van Creveld likens this concept to a child's game "rock-scissors-paper."<sup>35</sup> Here each element of the game is able to beat the one coming after it while itself being vulnerable to the one preceding it. Maneuver warfare employs combined arms in battle in order to fight the enemy where and when he is weak and present him with a series of tactical dilemmas versus problems. The value of combined arms warfare is obtained from the value of its diversity, not in the correlation of force ratios compared to those of the opponent. This is not to say that mass is not important but that the effects of mass are enhanced by the diversity of threats presented by combined arms. Mass in and of itself may overwhelm an enemy but less mass is required utilizing combined arms. This is the result of combined

arms ability to produce a wider range of effects than the enemy can counter and thereby overwhelming him.<sup>36</sup>

These first four critical elements of maneuver are inherent to the ability of a force to rapidly adapt to uncertain situations. Therefore the fifth critical element of maneuver is flexibility. The U.S. Army's Field Manual 100-5: Operations, discusses flexibility in terms of detailed planning which enables commanders to shift their point of main effort quickly without losing synchronization.<sup>37</sup>

Unfortunately, FM 100-5 only discusses flexibility in the section dealing with the defense. In maneuver warfare, flexibility permits an organization to absorb hits without impairing its ability to function, ensures smooth cooperation between different elements and, most importantly, flexibility is necessary to defeat an active, reactive, thinking opponent, whether in offense or defensive operations.<sup>38</sup> Critical to the element of flexibility in a rapidly moving, fluid battle or campaign is the sixth element of maneuver warfare, decentralized command.

Even with the most technologically advanced communications system, it is likely that the information needed to monitor the situation may well be so great as to cause information overload thereby impeding rapid decision making and movement; paralysis by analysis. The only way to solve this dilemma is to rely on a distribution of responsibility among various echelons of command. "In maneuver warfare, units and commanders who merely follow orders, let alone wait for them are useless."<sup>39</sup> Therefore, if subordinate commanders, and troops are to use the initiative required for the conduct of maneuver warfare, they must understand the army's objectives at least two levels above their own and how the

purpose of their operation fits into the plans of higher headquarters. The German concept of *Auftrgstaktik* or directive control is key to the decentralization necessary for successive OODA Loop cycles in maneuver warfare.<sup>40</sup> Similarly, mission type orders are inherent in current U.S. doctrine. FM 100-5 states that mission type orders specify what subordinate commands are to do without prescribing how they must do it.<sup>41</sup>

Maneuver warfare seeks to defeat the enemy by attacking or threatening his center of gravity, the critical vulnerability, instead of his source of strength through the use of dislocation. Webster's dictionary defines dislocation as "to put out of place: as... to put (a body part) out of order by displacing a bone from its normal connections...to cause confusion in: cause to deviate from a normal or predicted course or situation or relationship...."<sup>42</sup> For the purpose of maneuver warfare, dislocation is defined as rendering the enemy strength irrelevant by removing him from the decisive point, or preferably, by removing the decisive point from him.<sup>43</sup>

There are at least four types of dislocation: positional, functional, temporal and moral. Although each of these may differ in how they render an enemy's strength irrelevant, they are all based on a decisive fight against a disadvantaged enemy. The first of these, positional dislocation, renders an enemy's strength irrelevant by causing it to be in the wrong place, oriented in the wrong direction, or in the wrong formation to achieve its purpose. Forces positionally dislocate an enemy's strength by removing that strength from the decisive point or by removing the decisive point from the strength.<sup>44</sup>

The historical appeal of envelopment as a form of maneuver is that it moves the decisive point from in front of the enemy position, where his attention is fixed; forces then attack his flank, where he is vulnerable. Similarly, the turning movement positionally dislocates the strength of the defense by causing the enemy to leave a prepared defense and attack in a direction, which they are not prepared.<sup>45</sup> This is reminiscent of the German ideal of Kesselschlacht.

Similarly, functional dislocation also seeks to render enemy strengths irrelevant. Functional dislocation seeks to accomplish this by rendering them temporarily dysfunctional through the disruption of key functions at the critical time.<sup>46</sup> The combined arms approach seeks to achieve functional dislocation by presenting an enemy strength more problems than it can react to at once. An example of functional dislocation is the use of artillery fires to disrupt an enemy's air defense network so that the decisive point can be attacked from the air.

The third form of dislocation is temporal dislocation. Temporal dislocation renders the enemy's strengths irrelevant by making enemy actions, decisions and dispositions untimely. Temporal dislocation focuses on fighting the enemy when he is unready.<sup>47</sup> Dislocating the enemy with respect to time is a consequence of surprise; a vital element of maneuver warfare.<sup>48</sup> Temporal dislocation is the goal being pursued when forces attempt to increase their tempo to a point in which they overwhelm the enemy.

Robert Leonhard argues that the underlying precept to temporal dislocation is that "all military organizations are perpetually unready for combat."<sup>49</sup> Because military units perform a Variety of activities other than fighting



(i.e. training, movement, resupply, planning, etc.), this perpetual unpreparedness is therefore a natural condition of the military in war and peace. That the very requirement to establish security exists and is a priority in military operations is recognition that military units are in a perpetual state of unreadiness.<sup>50</sup>

Therefore, temporal dislocation renders an enemy's strength irrelevant by fighting it when it is unready, in its natural condition.

The last form of dislocation is moral dislocation. Moral dislocation aims at manipulating an enemy's strength irrelevant by defeating the minds and spirit of its soldiers, especially its leaders and causing them to lose their will to fight.<sup>51</sup> Moral dislocation derives from the combined effects of the other forms of dislocation. Napoleon said, "In war the moral element is to all others as three is to one."<sup>52</sup> "While war maybe politics by other means, combat is not an extension of policy. Combat is a contest of arms and will between tired and terrified men."<sup>53</sup> These quotes observe the simple fact that a force either enemy or friendly may be strong in many aspects, but if its soldiers are unwilling to fight, and its leaders unable or incapable of making decisions, those strengths are irrelevant. If the effects of maneuver warfare can lead to moral dislocation, that is, if both the leaders and soldiers believe the situation is hopeless and lose their will to fight than the friendly commander has achieved a decision over an otherwise strong enemy force.

It can be argued that most if not all of the previous discussed concepts of maneuver warfare are not only possible to achieve today, but are described in current joint and service doctrine. While this may be true, evidence suggests

that the U.S. Army does not necessarily feel obligated to follow its own doctrine.<sup>54</sup> Martin van Creveld contends that regardless of their current doctrine, the American Military tends to find maneuver warfare counterintuitive.<sup>55</sup> He contends that the U.S. armed forces have had the tradition and luxury of historically fighting from a position of strength.<sup>56</sup> This argument is congruent with those of Edward Luttwak who contends that "nations that see themselves as materially strong or merely rich in resources will generally feel free to pursue an attritional approach."<sup>57</sup> Conversely, "those who view themselves as material weak, will instead adjust their priorities to the vulnerabilities they see in others."<sup>58</sup> This is done to avoid a costly conflict of attrition by gaining an asymmetric advantage.

At the beginning of the twenty-first Century the U.S. armed forces no longer has the luxury of building a force to directly overwhelm an opposing force. Now and project to the year 2010 the U.S. armed forces will be a smaller, technology advanced, CONUS based power projection force, that will have to rely on maneuver warfare and the associated forms of dislocation to impose its will on an enemy force through asymmetric means. Decisive results in future conflicts will result from the defeat of the enemy, not necessarily his destruction. Recognizing this "JV 2010" presents four new operational concepts the core concept being that of dominant maneuver.

The new operational concept of dominant maneuver is the application of information, engagement, and mobility capabilities to position and employ widely dispersed joint air, land, sea, and space forces to accomplish the assigned

operational tasks. Forces employing dominant maneuver will gain a decisive positional advantage by controlling the entire battlespace and through a combination of asymmetric leverage as well as superior speed and tempo that will allow forces to apply decisive force. The organizational aspect of dominant maneuver structures a more agile, faster moving joint operations force which will combines air, land, and maritime forces more effectively than current force structure to deliver decisive combat power.<sup>59</sup>

The concept of dominant maneuver requires forces to be proficient at conducting sustained and synchronized operations from dispersed locations. These forces must be able to apply overwhelming force in the same medium and create a smaller footprint, which will make it much more difficult for an adversary to find and attack our forces. Other defensive measures included in the concept of dominant maneuver are low observable technologies, signature reduction, and enhanced deception capabilities, which will provide similar advantages for protection and improve chances for mission success.<sup>60</sup>

The tailor-to-task organizational ability of the dominant maneuver force structure is also perceived to provide the additional advantage of self-protection. The combination of seamless operations with reduced "buildup time" and a smaller, more widely dispersed force gains asymmetric advantages by using air or sea forces to attack ground forces or ground and sea forces against air defenses. These forces will have the ability to outpace and outmaneuver the enemy by using current systems, enhanced by information superiority, which will provide a clearer picture of enemy and friendly locations. This information

superiority will allow commanders to coordinate widely dispersed units, receive accurate feedback, and execute more demanding, higher precision operations successfully. Increased combat power and lethality of these forces as they maneuver will be obtained with lethal direct and indirect fire systems, with longer ranges and more accurate targeting.<sup>61</sup>

Although "JV 2010" proclaims dominant maneuver is a new operational concept it has evolved from and is related to the traditional concept of maneuver. If the purpose of maneuver is to gain positional leverage over an opponent; to apply strength against an opponent weakness, then "JV 2010" is the evolution of maneuver to dominant maneuver through the integration of emerging technology with that of maneuver warfare theory. Dominant maneuver capitalizes on the capabilities of enhanced information technologies using highly trained and mobile forces to dislocate an opposing force and compelling this force to react from a unfavorable position. In the early 1900s von Molotke, von Schlieffen, and the Imperial German Army came to a very similar solution to the strategic situation when after World War One their armed forces were limited in size during a period in time when a multitude of new technologies were being developed.<sup>62</sup> The solution they derived was designated as the doctrine of decisive maneuver popularly known as "Blitzkrieg" – lightning war.<sup>63</sup> Decisive maneuver like dominant maneuver applied emerging technologies of the period with existing systems and tactics.

Like traditional maneuver, dominant maneuver seeks a positional advantage relative to the enemy. But where maneuver seeks to position

traditional maneuver forces to mass firepower, dominant maneuver seeks to position an array of air, land, sea, and space capabilities to mass a broader range of effects. These capabilities will enable a commander to keep forces involved in dominant maneuver in widely dispersed locations until the right time, then concentrate their capabilities in an intense blow against enemy decisive points and centers of gravity, and rapidly redisperse forces if necessary. This is seen as tremendously different and much more powerful concept than traditional maneuver built on two prime enablers: advanced technologies and information superiority.<sup>64</sup>

Advanced technologies will provide a range of improvements and an array of new capabilities. Improved munitions, propellants, weapons, and platforms have the potential to significantly increase both individual and unit lethality and provide new, nonlethal capabilities as well.<sup>65</sup> Additionally, new organizational design will maximize the full potential of these new capabilities and achieve new levels of organizational agility and versatility that will allow the force to quickly adapt to changing battlespace conditions and respond to a wide array of missions. Collectively, these innovations and enhancements are seen to provide unprecedented capabilities for achieving dominant maneuver in 2010.<sup>66</sup>

Although critical, these innovations and improvements alone will not transform maneuver into dominant maneuver. Information superiority is what makes dominant maneuver a new concept; the combination of these new capabilities with information superiority will enable dominant maneuver. Information superiority will provide U.S. forces information that leads to an

unprecedented level of battlespace awareness. It also will enable a previously unachievable command and control capability that will allow commanders to rapidly mass effects, and forces when necessary, anywhere in the battlespace to outpace and overwhelm the enemy.<sup>67</sup>

Dominant maneuver is seen as capable of generating a new battlespace framework that differs from the current construct of "close, deep, and rear." This framework will replace the notion of fighting deep to influence the close fight with a more sophisticated concept that asserts the simultaneous application of combat power throughout the battlespace that has an exponentially greater effect and achieves decisive results more quickly. It replaces the associated linear battlespace construct with a new nonlinear model that does not require a contiguous array of forces. Information-based control versus physical control of force and forces will have a tremendous effect on tempo of operations and the rapid massing of effects throughout the battlespace. Likewise, it expands traditional ideas of "mass" with the notion that it can now be achieved by massing effects from dispersed locations as well as massing forces themselves.<sup>68</sup> This ability relies on information capabilities of yet to be developed technologies in communications and transportation.

The resulting information superiority will allow information-based control to displace physical control of forces, characterized by contiguous force arrays and physical or geographic boundaries that will make physical seams between forces or areas of operations less relevant. Many traditional graphic control measures—such as the fire support coordination line and unit boundaries that

are necessary to maintain order in the battlespace can be supplanted by information-based methods that will contribute to rapid massing of force and forces. Accurate, real-time, and more complete battlespace awareness will enable timely decisions to create or leverage windows of opportunity. This will promote seamless integration of both forces and capabilities while limiting the potential for fratricide. Automated decision aids will greatly facilitate routine decision-making and significantly improve the ability to outpace and overwhelm the enemy.<sup>69</sup>

Dominant maneuver will allow deployable, agile, and versatile forces trained for combat to prepare quickly for noncombat missions and apply their inherent overwhelming capabilities to the full range of military operations. In noncombat situations, they will have the intrinsic ability to seize and maintain control of any situation by rapidly responding to emerging challenges and opportunities. Information superiority will provide the means to precisely assess any situation and to plan and execute responses across the entire range of operations. Just as they are in war, decisive operations in other military operations will be achieved through the application of specifically tailored capabilities at the decisive point and time.<sup>70</sup>

Through the combination of the elements of maneuver warfare theory (tempo, Schwerpunkt, surprise, combined arms, flexibility and decentralized command) with emergent information age technology, dominant maneuver is seen to provide the U.S. armed forces with a significant advantage over future potential opponents. With superior mobility and information capabilities,

dominant maneuver forces will control the tempo of operations, and dislocate an enemy both strategically and operationally through a combination of speed and surprise. By rapidly putting a U.S. presence on the ground, a crisis ranging from a natural disaster to general war may be defused before it occurs. Through the flexibility offered by information age technologies, the increased potential exists to psychologically defeat an opponent without the excessive and costly of attrition warfare.<sup>71</sup>

Although defeating a hostile force will remain the primary purpose of dominant maneuver, many situations will not be suitable for the employment of firepower. These forces will have to be able to perform many other functions. These other functions can range from support operations such as humanitarian assistance to stability operations like peace keeping... "it was dominant maneuver forces on the ground ... that successfully secured U.S. interests in Bosnia and Haiti."<sup>72</sup> The characteristics, which inherent to dominate maneuver, are not only essential to success in a combat environment but also applicable in operations other than war. However, these essential characteristics are still for the most part under development and should not be confused with the capabilities present in the U.S. armed forces as they are in 1999.



#### **IV. Focused Logistics**

The new operational concept of focused logistics (along with the concepts of Dominant Maneuver, Precision Engagement, and Full Dimensional Protection) relies on the ability of the United States to project forces at the time of its choosing to any place in the world. To accomplish this and optimize the other three operational concepts put forth in "JV 2010"; logistics support must be responsive, flexible, and precise. The concept of focused logistics is seen to incorporate these characteristics by being a fusion of information, logistics, and transportation technologies. This fusion enables focused logistics to provide rapid crisis response, the ability to track and shift assets even while enroute, and the ability to deliver tailored logistics packages and sustainment directly at the strategic, operational, and tactical level of operations. To accomplish this focused logistics forces are foreseen to be adaptive to the needs of increasingly dispersed and mobile forces, capable of providing support in hours or days versus weeks.<sup>73</sup>

The capabilities inherent in the concept of focused logistics are designed to enable U.S. forces of the future to be more mobile, versatile, and projectable to anywhere in the world. To accomplish this logistic agencies are incorporating information technologies to transition from the rigid vertical organizations of the past to modular and specifically tailored combat service support packages. Furthermore, focused logistics requires service and defense agencies to work

jointly and integrate with the civilian sector in order to take advantage of advanced business practices, commercial economies, and global networks. Furthermore, active and reserve combat service support capabilities are being restructured to provide indefinite logistic support and sustainment for joint forces. In conjunction with restructuring, indefinite support capability not only relies on military combat support capabilities but also their ability to integrate contracted commercial logistics assets and capabilities on a scale unprecedented in the U.S. armed forces.<sup>74</sup>

Additionally, information technologies being pursued are foreseen to enhance airlift, sealift, and pre-positioning capabilities in order to lighten deployment loads, assist pinpoint logistics delivery systems, and extend the reach and longevity of logistic support systems currently in the inventory. The combined result of these improvements is foreseen to be a smaller, more capable force, which requires less continuous support. This in turn will result in a smaller logistics footprint, decreasing the vulnerability of U.S. logistics lines of communication.<sup>75</sup>

Underlying the concept of focused logistics is the leveraging of technology innovation and information superiority. With the other operational concepts of Dominant Maneuver, Precision Engagement, and Full Dimensional Protection these capabilities are foreseen to achieving the "JV 2010" endstate capability of full spectrum dominance. Focused logistics is believed to support full spectrum dominance through the achievement of a capability referred to as "full spectrum supportability"<sup>76</sup>. To achieve this, the six tenets of focused logistics emphasize a

systematic approach by providing a framework for designing a logistics template in warfighting.<sup>77</sup>

To achieve full spectrum supportability, the U.S. Joint Staff, in coordination with the CINCs, Services, and CSAs have developed a list of the tenets of focused logistics.<sup>78</sup> These tenets, working in combination with one another, are designed to provide highly responsive support to U.S. forces across the spectrum of warfare in any type of engagement or environment.

In accomplishing this the joint logistics challenge of the future is foreseen to be reduced response times, order and ship times, inventories, and a smaller yet flexible sized logistics footprint while increasing support to deployed forces.<sup>79</sup> To accomplish this rapid transportation assets and time-definite delivery of materials and personnel will be required to replace the current large inventories as the movement of units, supplies, and equipment accelerate. As U.S. forces evolve from a point supply system to a distribution-based sustainment system, support systems must be produced that will be far more visible, reliable, and accessible than those currently in use. Synchronization of these new logistics support systems will become even more critical in the future, as the implementation of the other operational concepts of JV2010 will make coordinated efforts more difficult. This increase in difficulty is anticipated to result from maneuver forces becoming more dispersed and while there are fewer logistic nodes and assets to support them.<sup>80</sup>

To facilitate the requirement for increased synchronization; the concept of focused logistics calls for increased responsiveness, visibility, and accessibility of

logistics resources. The desired end state being full spectrum supportability.

Full spectrum supportability is defined as the ability to support the end user from a single source of supply while maximizing the benefits to be gained from information superiority and technological innovation and a continuous interaction among requirements, technology, and capabilities.<sup>81</sup>

To achieve full spectrum supportability the tenets, programs and associated capabilities of focused logistics are to be developed and implemented in phases. The first phase of this development and implementation targets current initiatives that are directly tied to enhanced future capabilities, focusing on resolving deficiencies identified by the Unified Commands and Services. This phase is foreseen to establish the capabilities required achieving the focused logistics capabilities put forth in "JV 2010" providing the armed forces of the United States with both the capability and confidences required to effectively and efficiently succeed on the envisioned 2010 battlefield. In the second phase of development and implementation the concept of focused logistics and its inherent capabilities and forces are foreseen to be modified to provide the required support to the other operational concepts of Joint Vision 2010 as they evolve. As such, the concept of focused logistics is not a fixed vision of future logistical support, but rather a flexible concept adaptable to the actual endstate requirements of the other three operational concepts put forth in "JV 2010".<sup>82</sup>

Meanwhile, the U.S. logistics support infrastructure and associated forces will continue to be challenged with the task of supporting U.S. forces committed on short notice to potentially hostile environments for unknown duration. In

these future commitments unlike Operation Desert Shield/Storm, it is foreseen that the United States we will not have the lead-time necessary to develop the "traditional" logistics infrastructure. Complicating this situation, the United States political leadership will most likely come under continuing domestic pressure to decrease defense expenditures through downsizing the armed forces while yet maintain high states of readiness. Future force structure, particularly logistics force structure, has and will most likely continue to come under close scrutiny as an area of source of cost savings. Hence, future military operations are likely to find a great many logistics functions privatized or outsourced. This situation already has and will continue to make the contribution of the Reserve Component an important part of the United States national military strategy.<sup>83</sup>

Dealing with these challenges, it is believed that focused logistics can be achieved only through development and adoption of efficient processes and products. Facilitating this, the concept of focused logistics requires logisticians to more fully examine joint and combined operations vice maintaining their current functional and/or service focus. Facilitating this are existing processes such as the Joint Monthly Readiness Review (JMRR), Joint Warfighting Capability Assessment (JWCA) and contingency lessons.<sup>84</sup>

In addition to requiring logisticians to adapt a wider focus, the concept of focused logistics and the capabilities it represents is dependent on the imperative of technological advantage; the need for faster, more reliable and integrated logistics systems. This dependency is the result of the requirement that logisticians must have the capability to tailor forces and resources by both

expanding and contracting support units and force packages as the nature of our threats change from large scale Major Theater War (MTW) to Smaller Scale Contingencies (SSCs). To accomplish this the logistics systems envisioned by focused logistics include refined techniques for ensuring combat readiness and sustainment. The endstate being full spectrum support from deployment to redeployment, reconstitution or forward deployment, enhancing both combat effectiveness and the quality of life of deployed forces.<sup>85</sup>

In providing full spectrum support, the concept of focused logistics envisions logistics organizational structures of the future will be streamlined to minimize the logistics footprint. Supporting this are improvements being made in logistics command and control and theater distribution capabilities.

Developments in the Automatic Identification Technology (AIT) integrated into automated information systems (AIS) and its interface with suppliers will enhance automated tracking of assets throughout the world. This capability in conjunction with a rapid air, sea, and land transportation system is foreseen to reduce logistics response time, which will contribute to a streamlined effective, efficient, and economical logistics system minimizing the logistics footprint.<sup>86</sup>

Technology is the critical component in the achievement of these focused logistics capabilities. Technology being developed is envisioned to enable logistics information superiority in evolving, interoperable clusters of capabilities mapped to user requirements. Information interoperability is essential to providing one common picture of the extended battlefield not only to logisticians but also maneuver commanders. This capability requires the cooperative

development of computer software that will permit logistics forces to be proactive in their anticipation of requirements as opposed too reactive to the needs of deployed forces. These technological innovations and the capabilities they enable also have implications for joint doctrine.

These technologies, the capabilities associated with them and focused logistic forces will be guided in their employment by the principles set forth in doctrine. Consequently, Joint Publication 4-0, Doctrine for Logistics Support of Joint Operations, during fiscal year 1999 is under revision with plans to include discussion of focused logistics. While Joint Publication 4-0 provides overarching guidelines for logistics support, a series of Joint Tactics, Techniques, and Procedures (JTTP) are under development to provide more detailed explanation of processes that will have significant impact on joint logistics operations. The umbrella program of joint logistics publications is designed to integrate new and existing doctrine and technologies with a goal of optimizing and standardizing support to deployed forces resulting in full spectrum support.<sup>87</sup>

## **V. Conclusion**

Having examined the concepts of dominant maneuver and focused logistics this monograph concludes that the operational concept of focused logistics presented in "Joint Vision 2010" supports the operational concept of dominant maneuver presented in "Joint Vision 2010". General John M. Shalikashvili concurs with this, stating in "Joint Vision 2010", that:

Focused logistics will ensure delivery of the precise amount and types of supplies required for our joint forces to succeed in combat or non-combat operations. Likewise, the tactical mobility required for dominant maneuver, which enables our forces rapidly to move into position to overwhelm an enemy, will also allow commanders to place forces in positions of control in counterdrug, counterterrorism, or peacekeeping operations<sup>88</sup>.

However, critics are particularly concerned that in this era of limited defense dollars and rapidly changing strategic environments, long term budget decisions and force structure changes are being implemented in accordance with "Joint Vision 2010" capabilities and technologies as of yet developed or proven.<sup>89</sup> Critics believe that these changes jeopardize the United States ability to pursue the current national defense strategy. Furthermore, critics assert that these changes are being made in order to accommodate budgetary considerations and not the strategic security environment.<sup>90</sup>

"JV 2010" presents the concepts of dominant maneuver and focused logistics as new operational concepts. As presented dominant maneuver is not a new concept but one based on the historical principles of maneuver, which greatly resembles the Imperial German Army's concept of decisive maneuver. What is new is the capability maneuver forces attain from the realization of the



other three operational concepts in "JV 2010". These capabilities, when developed, are foreseen to give maneuver forces the ability to mass effects and forces rapidly from widely dispersed locations. Strategically and operationally mobile forces, "ready on arrival." Ready on arrival is defined in "JV 2010" as forces which arrive in theater with precise and immediate combat/operational assessment capability. Accurate, effective and sustainable delivery systems for direct and indirect fires and other effects, both lethal and nonlethal, from short and long ranges. Highly lethal, mobile, agile, and versatile organizations, adaptable maneuver units that can be tailored to task for any operation across the range of military operations. These abilities are not the result of any one program or technology but rather manifestations of capabilities being developed in the pursuit of the operational concepts of precision engagement, full-dimensional protection, and focused logistics.

Conversely, the concept of focused logistics presents "new" tenets pertaining to logistic support of deployed forces. These tenets of Focused Logistics<sup>91</sup> are not revolutionary in themselves but rather expressions of new capabilities logistic forces will have pending the development of technologies currently being pursued. Technology being developed is being pursued to give logistic forces the capability to support forces dispersed over greater distances more rapidly with fewer assets. This capability depends on the development of technologies which enable are faster and more accurate communications, automated tracking systems, more efficient and capable transportation assets and enhanced material handling capabilities. Without the realization of these

technological capabilities, the concept of focused logistics will never be realized. Without this realization the imperative of technological advantage; the need for faster, more reliable and integrated logistics systems that place critical supplies in the right place, at the right time, and in the right quantity will never be achieved. If the technologies being pursued do not achieve these capabilities it will not only prevent the achievement of focused logistics but also dominant maneuver. Without achievement of focused logistics capabilities maneuver forces will not be able to deploy, disperse, maneuver and fight as envisioned in the concept of dominant maneuver.

Technology is also critical in the achievement of maneuver and logistics information superiority in evolving, interoperable clusters of capabilities mapped to user requirements which underlies the ability to support, control and coordinate widely dispersed forces. In so doing information interoperability is essential to providing a common picture of the extended battlefield enabling battlespace awareness. This information interoperability must be achieved not only in the army but also among all U.S. forces and it has an impact on the U.S.'s ability to coordinate and operate effectively with coalition forces. This necessitates the development of intelligent and intuitive decision support planning tools that will permit logistics forces to be "proactive" as opposed to reactive to the needs of deployed forces. Similar tools are required to command and control maneuver forces.

This increased emphasis on precision of the logistics processes is critical in producing a more logistics capable forces available when and where they are

needed. This information superiority and battlespace awareness is foreseen to bridge the gap between logistics and operations to truly achieve one common picture of the extended battlefield for the commander of deployed forces.<sup>92</sup> Not achieving these capabilities will prevent both the concepts of focused logistics and dominant maneuver from becoming a reality.

As the critics of "JV 2010" have pointed out, the technologies that enable these logistics capabilities and by extension dominant maneuver are either under development or have yet to be developed. The same can be said about technologies being pursued in support of the other two operational concepts.<sup>93</sup> Nevertheless, the U.S. Department of Defense (DOD) has embarked on an ambitious ten-year effort to design and acquire increasingly precise weapons, sensors and information systems. Additionally and most alarmingly, DOD is implementing major changes in the structure of the armed forces to capitalize on these yet to be developed or proven capabilities<sup>94</sup>.

In spite of these criticisms "JV 2010" and the operational concepts contained within are vital to the U.S. Army's future. Whether or not "JV 2010" or the capabilities it projects ever materialize, "JV 2010" established a conceptual template for the future. This initial conceptual template charts a course of action for how the United States armed forces will prioritize and use scarce resources and leverage technological opportunities in the pursuit of new levels of effectiveness in conducting operations across the spectrum of warfare. Toward those ends, "JV 2010" has promoted thought and discussion about the future of the United States armed forces in the context of the broad range of anticipated

challenges. "JV 2010" also identifies shortcomings in current force structure and equipment that have driven the development of better and faster processes for evaluating and adapting emerging capabilities.

In an effort to correct these shortcomings identified in "JV 2010" current capabilities are being sacrificed in the pursuit of as yet to be achieved capabilities. Of greater concern to critics is their perception that strategic and operational decisions are being taken based on these future capabilities. These actions have the potential to make the United States vulnerable to its enemies and diminishes the United States credibility to deter those world actors who oppose the United States. Furthermore, these actions may undermine the confidence of U.S. allies, diminishing U.S. influence world events vital to its national interests. "JV 2010" is a conceptual template for the future, a vision, not a statement of current reality and capabilities on which to base strategic, operational or tactical decisions.

## VI. End Notes

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- <sup>1</sup> David Wood, "High-tech war lacks strategy, critics say", The Gazette, (Colorado Springs, CO, December 30, 1998), p. A4
- <sup>2</sup> Ibid.
- <sup>3</sup> Ibid.
- <sup>4</sup> Henry H. Shelton, "Operationalizing Joint Vision 2010", Military Review, (Fort Leavenworth, KS, May/June 1998), p. 81
- <sup>5</sup> Ibid.
- <sup>6</sup> U.S. Department of Defense funding in FY 98 as a percentage of the gross national product was the smallest since the 1930s. For more information see Center for Defense Information, Analytical studies Quadrennial Defense Review at <http://www.comw.org/qdr/qdrlinks.htm>
- <sup>7</sup> William S. Cohen, Report of the Quadrennial Defense Review, (Department of Defense, May 1997)
- <sup>8</sup> Ibid.
- <sup>9</sup> Henry H. Shelton, "Operationalizing Joint Vision 2010", Military Review, (Fort Leavenworth, KS, May/June 1998), p. 82
- <sup>10</sup> David Wood, "High-tech war lacks strategy, critics say", The Gazette, (Colorado Springs, CO, December 30, 1998), p. A4
- <sup>11</sup> John M. Shalikashvili, "Joint Vision 2010", (Washington: Defense Printing Service, 1995) p.1
- <sup>12</sup> Ibid. p. 2
- <sup>13</sup> Ibid. p.3
- <sup>14</sup> Ibid. p.4
- <sup>15</sup> Ibid.
- <sup>16</sup> Henry H. Shelton, "Operationalizing Joint Vision 2010", Military Review, (Fort Leavenworth, KS, May/June 1998), p. 81
- <sup>17</sup> John M. Shalikashvili, "Joint Vision 2010", (Washington: Defense Printing Service, 1995) p.12
- <sup>18</sup> Ibid. p.13
- <sup>19</sup> Ibid. p. 19
- <sup>20</sup> Ibid. p. 20
- <sup>21</sup> Traditionally the method of determining the necessary time and place has been attributed to the concept of coup d'oil as presented by both Clausewitz and Jomini. However in accordance with "JV 2010", no longer will the determination of the necessary time and place rely on the experience and intuition of the commander, but rather will be based on total battlespace awareness which is the result of new surveillance and communications technologies.
- <sup>22</sup> FMFM 1, Warfighting, (Washington D.C., Headquarters, U.S. Marine Corps), p. 59

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<sup>23</sup> Ibid. p. 59

<sup>24</sup> Ibid.

<sup>25</sup> Ibid. p. 59 - 60

<sup>26</sup> Martin van Creveld, Air Power and Maneuver Warfare, (Maxwell Airforce Base: Air University Press, 1994), p. 2-8

<sup>27</sup> Field Manual 101-5-1, Operational Terms and Graphics, (Headquarters, Department of the Army and United States Marine Corps, Washington D.C., 30 September 1997), p. 1-153

<sup>28</sup> William S. Lind, The theory and Practice of Maneuver Warfare, (Boulder, CO: Westview Press Inc), p. 5

<sup>29</sup> Ibid. p. 17

<sup>30</sup> Martin van Creveld, Air Power and Maneuver Warfare, p. 3

<sup>31</sup> The 1940 German invasion of France is an excellent example of placing *schwerpunkt* against a weakness to achieve operational success. The French and British expected the invasion route to be through Belgium, so they massed their strength there along the Maginot Line. The Germans designated General Rundstedt's Army Group A, the *schwerpunkt*, at Ardennes; lightly guarded and considered impenetrable by the allies. General von Bock's Army Group B along the Belgian border and General von Leeb's Army Group C along the Maginot Line supported Army Group A with fixing attacks. Spearheaded by panzer forces, Rundstedt's forty-five divisions quickly poured through the "gap" at Ardennes.

<sup>32</sup> Martin van Creveld, Air Power and Maneuver Warfare, p. 4

<sup>33</sup> Ibid.

<sup>34</sup> U.S.Army FM 100-5, Operations, p.2-3

<sup>35</sup> He explains: in maneuver warfare, tanks should not be used to smash other tanks, which would merely lead to head-on clashes and attrition, but enemy artillery. Artillery is powerless against tanks; hence it should be used to combat infantry, which in turn, is powerless against it and if not killed will be forced to take cover. The role of infantry is to neutralize the antitank arm and that of the antitank arm is to deal with tanks. van Creveld, Air Power and Maneuver Warfare, p. 5

<sup>36</sup> In "JV 2010" the concept of mass is perceived as even less important. "JV 2010" professes that the tempo (velocity) with which future forces will operate will make mass less important because enemy forces will not be able to react fast enough to oppose them before he is overwhelmed.

<sup>37</sup> U.S.Army FM 100-5, Operations, p.9-2

<sup>38</sup> van Creveld, Air Power and Maneuver Warfare, p. 6-7

<sup>39</sup> Ibid. p. 7

<sup>40</sup> The idea is that in order to exploit opportunities and the initiative of subordinates, the commander should confine his operations order to explaining the mission and his intent regarding the enemy. Including only such details as are absolutely necessary to coordinate the actions of his subordinates, he should allow his subordinates the freedom to figure out how to accomplish the task.

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Robert Leonhard, The Art of Maneuver Warfare, (Novato, CA, Presidio Press, 1991), p. 50

<sup>41</sup> U.S.Army FM 100-5, Operations, p.6-5 – 6-6

<sup>42</sup> William Morris, The American Heritage Dictionary of the English Language, (Houghton-Mifflin Company, Boston, 1981), p. 378.

The analogy of displacing a bone is useful to dislocation theory as it applies to maneuver warfare. If an athlete suffers a dislocated shoulder, it is obvious that he can no longer perform his primary role, in a physical sense, the injury makes the athlete useless to his team. Therefore, the athlete becomes irrelevant to the outcome of the game. Additionally, if dislocation causes confusion from one's "normal course, situation or relationship," to replace the injured athlete in a lineup can cause confusion on the team because the coach is forced to deviate from the game plan based on a change in the athlete's relationship to the team.

David E. Funk, "Tactical Dislocation: Force XXI Doctrine or Just Another Pretty Theory?", (Fort Leavenworth, KS, School of Advanced Military Studies Monograph, 1997), P. 23

<sup>43</sup> Leonhard, The Art of Maneuver Warfare, p. 66-67

Dislocation is further defined as an active measure, which attempts to set aside enemy strengths in order to allow us to apply our strengths against the enemy's critical vulnerabilities. It does not seek destruction of enemy strengths as the primary means of defeat, but seeks to dislocate those strengths as the first critical step in defeating and then destroying them, if required, with an asymmetrical fight. David E. Funk, "Tactical Dislocation: Force XXI Doctrine or Just Another Pretty Theory?", Fort Leavenworth, KS, School of Advanced Military Studies Monograph, 1997, P. 24

<sup>44</sup> Leonhard, "Dislocation and Force XXI A New Perspective on Commander's Intent." White Paper, Fort Monroe, VA: TRADOC Joint Venture Office, Undated p. 4

<sup>45</sup> David E. Funk, "Tactical Dislocation: Force XXI Doctrine or Just Another Pretty Theory?", (Fort Leavenworth, KS, School of Advanced Military Studies Monograph, 1997), p. 29

<sup>46</sup> Leonhard, "Dislocation and Force XXI A New Perspective on Commander's Intent." p.5

<sup>47</sup> Ibid. p.6

<sup>48</sup> Edward Luttwak describes the effects of surprise as follows: Surprise can be now be recognized for what it is not merely one factor of advantage in warfare among others, but rather the suspension, if only briefly, if only partially, of the entire predicament of strategy, even as the struggle continues. Without a reacting enemy, or rather according to the extent and degree that surprise is achieved, the conduct of war becomes mere administration.

Edward N. Luttwak, Strategy: The Logic of War and Peace, (Cambridge, The Belknap Press, 1987), p. 8

<sup>49</sup> Leonhard, "Dislocation and Force XXI A New Perspective on Commander's Intent." p.6

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- <sup>50</sup> Leonhard, The Art of Maneuver Warfare, Novato, CA, Presidio Press, 1991, p. 104-106
- <sup>51</sup> Leonhard, "Dislocation and Force XXI A New Perspective on Commander's Intent," p. 7-9
- <sup>52</sup> Frank H. Simonds in "Ardant du Picq, " Prefaces to Battle Studies, in Roots of Strategy, Book Two, Colonel John N. Greeley and Major Robert C. Cotton trans, (Harrisburg, Pennsylvania, Stackpole Books, 1987), p. VII
- <sup>53</sup> Mitchell M. Zais, "Ardant du Picq: unsung Giant of military Theory," Army, (April 1985), p. 58
- <sup>54</sup> See David E. Funk, "Tactical Dislocation: Force XXI Doctrine or Just Another Pretty Theory?", (Fort Leavenworth, KS, School of Advanced Military Studies Monograph, 1997). In this monograph, the author reviews several arguments on the discrepancies between current doctrinal concepts and actual practice.
- <sup>55</sup> Martin van Creveld, Air Power and Maneuver Warfare, p. 8
- <sup>56</sup> Ibid. Therefore: "For them, war has often been a question of maximizing the blows they could deliver on the basis of available resources, then exchanging blow for blow until the weaker side, almost always the enemy, was attrited to the point of being no longer combat capable."
- <sup>57</sup> Edward N. Luttwak, Strategy: The Logic of War and Peace, (Cambridge, The Belknap Press, 1987), p. 97
- <sup>58</sup> Ibid.
- <sup>59</sup> John M. Shalikashvili, "Joint Vision 2010", (Washington: Defense Printing Service, 1995) p. 21
- <sup>60</sup> Ibid. p. 22
- <sup>61</sup> Ibid. p.23
- <sup>62</sup> Examples of this new technology are the improvements in aircraft, communications, tanks and radar.
- <sup>63</sup> Matthew Cooper, The German Army 1933 – 1945, (Scarborough House/Publishers, Chelsea, MI, 1990), p. 113 –158.
- <sup>64</sup> Dennis J. Reimer, "Dominant Maneuver and Precision Engagement," Joint Forces Quarterly, (Winter 96/97), p.14
- <sup>65</sup> Innovations in combat identification, multispectral obscurants, stealth technology, reduced electromagnetic and thermal signatures, and improved armor will dramatically affect survivability. Mobility will improve greatly due to advances in obstacle detection and neutralization; innovations to enhance or enable 24-hour, all-weather, contaminated environment operations; and improved power plant technologies.
- <sup>66</sup> John M. Shalikashvili, "Joint Vision 2010", p. 12
- <sup>67</sup> Dennis J. Reimer, "Dominant Maneuver and Precision Engagement", p.13
- <sup>68</sup> Grant Steffan, "Dominant Maneuver and Precision Engagement," Unpublished Paper (FORSCOM J5, Fort McPherson, Georgia, 1997), p. 4
- <sup>69</sup> Ibid. P. 5
- <sup>70</sup> Shalikashvili, "Joint Vision 2010", p. 21
- <sup>71</sup> Steffan, p. 4
- <sup>72</sup> Dennis J. Reimer, "Dominant Maneuver and Precision Engagement," p.14



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<sup>73</sup> Shalikashvili, "Joint Vision 2010", p. 25

<sup>74</sup> Although this resembles current LOGCAP initiatives, the scope and degree in which Combat Support and Combat Service Support of deployed forces will rely on contracted commercial agencies is unparalleled.

<sup>75</sup> Shalikashvili, "Joint Vision 2010", p. 25

<sup>76</sup> John J. Cusick and John M. Shalikashvili, "Focused Logistics Roadmap", Washington D.C.: Government Printing Office, September 1997, p. 1

<sup>77</sup> Ibid.

<sup>78</sup> These tenets are Joint Deployment/Rapid Distribution, Information Fusion, Joint Theater Logistics Command and Control (Joint Log C 2), Multinational Logistics, Joint Health Services Support (JHSS), and Agile Infrastructure. Ibid. P. 3

<sup>79</sup> A logistics footprint includes all personnel, war reserves, and propositioned materiel required to support to the maneuver commander, usually regarded as the responsible CINC.

<sup>80</sup> Cusick and. Shalikashvili, p. 8

<sup>81</sup> Shalikashvili, "Joint Vision 2010", p. 29

To ensure continuous interaction, OSD, Director for Defense Research and Engineering (DDR&E) publishes the "Joint Warfighting Science and Technology Plan (JWSTP)" annually. This plan is then incorporated into the DOD funding request and it becomes part of the President's Budget to Congress. The fiscal year 1999 plan currently maps the strategy of JV2010 and the critical elements of the JWCA process to specific Defense Technology Objectives (DTOs). These DTOs are then executed through Advanced Concept Technology Demonstrations (ACTDs). ACTDs accelerate the development and demonstration of new capabilities by working directly with the end user. The Joint Logistics ACTD (JLACTD) is specifically concerned with providing state-of-the-art technology to support focused Logistics.

The Joint Logistics Advanced Concept Technology Demonstrations (JLACTD) has three phases. Phase I (implemented in 1986 and ended in 1997) provided an initial suite of decision support tools that were largely developed to support operational requirements for Operation JOINT ENDEAVOR. Phase II (Joint Decision Support Tools) has broaden the scope of requirements identified during Operation JOINT ENDEAVOR to include all joint users promoting commonality of capabilities and equipment throughout DOD. This was particularly necessary to ensure any new decision support software will operate in the Global Combat Support System (GCSS). Global Combat Support System (GCSS) common operating environment; be available to joint users through the GCSS intranet-like capability; use actual data captured by AIT and other sources. Phase III (Real Time Focused Logistics) will merge the successes of earlier phases with other ACTDs focused on operations, planning, and communications and other initiatives such as Defense Advanced Research Projects Agency's (DARPA's) Advanced Logistics Program (ALP).

As the capstone effort, Phase III will demonstrate the capability to: Capture, see, and use current, accurate, and timely source data; support

logistics processes from vendor to end user; plan/forecast and prioritize logistics requirements based on a robust suite of joint decision support tools; and conduct timely modeling and simulations in support of actual operations based on actual data. To oversee the JLECTD, a new management structure has been established that emphasizes teamwork among a host of key players: the DARPA, the Defense Information Systems Agency (DISA), the Deputy Under Secretary of Defense for Logistics [DUSD(L)], the Deputy Under Secretary of Defense for Advanced Technology [DUSD(AT)], the Joint Staff J-4, and most important, the user community to include Services, Agencies, and CINCs. DARPA will provide the technology in-fusion and the coordination with a host of other technology initiatives that have logistics implications. For example, DARPA's ALP is already exploring opportunities to converge operations and logistics information systems as an operational plan is executed. DISA contributes technical infrastructure and the technical roadmap for our logistics information systems to follow. DISA will provide communication links, a common operating environment to support virtually any computer, and an "intranet-like" capability to significantly increase access to information enhancing the ability of all logisticians at every level to track and maintain accurate knowledge of critical supplies and assets. Cusick and Shalikashvili, p. 9-15

<sup>82</sup> Ibid.

<sup>83</sup> Shalikashvili, "Joint Vision 2010", p. 30

<sup>84</sup> Cusick and. Shalikashvili, p. 16

<sup>85</sup> Ibid. p. 17

<sup>86</sup> Ibid. p. 18

<sup>87</sup> Ibid. p. 19

<sup>88</sup> Shalikashvili, "Joint Vision 2010", p. 25

<sup>89</sup> Ibid.

<sup>90</sup> David Wood, "High-tech war lacks strategy, critics say", The Gazette, (Colorado Springs, CO, December 30, 1998), p. A4

<sup>91</sup> Tenets of Focused Logistics: Joint Deployment/Rapid Distribution, Information Fusion, Joint Theater Logistics Command and Control (Joint Log C 2), Multinational Logistics, Joint Health Services Support (JHSS), and Agile Infrastructure

<sup>92</sup> Cusick and Shalikashvili, "Focused Logistics Roadmap", p. 17

<sup>93</sup> Of all of the operational concepts being developed, precision engagement is the currently the most developed. This is the result of years of research and development having been devoted to precision weapons many, which are in the U.S. inventory and often used, such as the TLAM. These weapons with already proven capabilities are the basis for even further development in pursuit of the concept of precision engagement.

<sup>94</sup> An example of structural changes in Army implemented IAW "JV2010" is the removal of one M2 BFV company from mechanized infantry battalions and the removal of one tank company from armor battalions in FY 98 and 99. But although this restructuring is occurring in FY 98 and FY 99 the capabilities to

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make up for the decrease in combat power are not yet developed nor are they scheduled for fielding when they are until FY 2008-2010.

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